

Date: Mon, 6 Jun 94 03:32:23 PDT
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>
Errors-To: Info-Hams-Errors@UCSD.Edu
Reply-To: Info-Hams@UCSD.Edu
Precedence: Bulk
Subject: Info-Hams Digest V94 #634
To: Info-Hams

Info-Hams Digest Mon, 6 Jun 94 Volume 94 : Issue 634

Today's Topics:

 30L-1 to 500C
 440 in So. Cal. (2 msgs)
 Daily Summary of Solar Geophysical Activity for 05 June
 SMALL HT POUCHES 4SALE
 SSB Filters (2 msgs)

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 6 Jun 1994 00:47:50 -0700
From: ihnp4.ucsd.edu!news.cerf.net!bengal.oxy.edu!mcws!
FUsenetToss@network.ucsd.edu
Subject: 30L-1 to 500C
To: info-hams@ucsd.edu

It's a total waste of time and energy to connect the 30L-1 to the Swan.
The output power of the Swan is practically the same; you will get only
about 3 dB improvement at best, one half an S unit.

You would have to go to something like a 30S-1 or Henry 2K to get enough
to come close to being worth the trouble. Why not sell one of the two
units and come out ahead? The Swan is pretty much obsolescent, and you
could get a modern rig; the 30L-1 is in demand and you could get good
money for it.

I'm not putting down your equipment, but the combination of those two
isn't a good one. 73 DE K6DDX

Date: 5 Jun 1994 22:07:20 -0700
From: ihnp4.ucsd.edu!usc!elroy.jpl.nasa.gov!netline-fddi.jpl.nasa.gov!nntp-server.caltech.edu!news.claremont.edu!kaiwan.com!not-for-mail@network.ucsd.edu
Subject: 440 in So. Cal.
To: info-hams@ucsd.edu

Michael P. Deignan (md@pstc3.pstc.brown.edu) wrote:
> The FCC recognizes all repeaters are "closed". If you attempt to allot
> frequency coordinations on the basis of the trustee's willingness to
> allow operators to utilize the machine at that frequency, you had best
> be ready to defend your position financially.

Michael, not to pick on you. I've seen this mis-repeated about a half-dozen times in this thread so I picked yours to reply to.

THE F.C.C. DID NOT OUTLAW AND/OR CLOSE "OPEN" REPEATERS. All they did was reaffirm the right of the licensee to determine who uses the repeaters under his control and callsign. They cited chapter and verse what Part 97 already said. Nothing new here.

"An open repeater is a repeater that does not limit those who use the repeater to members, affiliates, or other defined group or list of operators." (source, "KJ6YT's Authoritative and Official Sounding Book of Ham Radio Definitions, Volume 1.)

An open repeater's trustee can still keep KW6UNK from using the repeater to read his 60's poetry -- or even at all, if he wishes. The FCC doesn't care if the licensee considers his repeater "open" or "closed." The FCC says that the licensee can pick and choose who can and cannot use the repeater.

> I don't arbitrarily assign "utilization" as the criteria by which
> repeaters should be coordinated. There are numerous repeaters in this
> area which receive less utilization than my closed machine. Using your
> criteria, we should decoordinate those "open" repeaters.

> Since high utilization of an open repeater generally implies excellent
> coverage, it also implies high site, high power, and expensive equipment.

> Sounds like you want a free ride at everyelses expense.

No, but perhaps it should be a criteria. For example, your application for a 3-neighbor system at the county's highest location vs. a 200-member club who wants to put up an open repeater at the same site. Who should be approved for the high-visibility site? The 200-member club's open

system. Who should be guided toward better use? The 3-user system.

--

____[Robb Topolski]____[San Clemente, CA]____[topolski@kaiwan.com]____

Date: Sun, 05 Jun 1994 19:57:00 PST

From: ihnp4.ucsd.edu!library.ucla.edu!psgrain!nntp.cs.ubc.ca!mala.bc.ca!epaus!ham!
emd@network.ucsd.edu

Subject: 440 in So. Cal.

To: info-hams@ucsd.edu

gary@ke4zv.atl.ga.us (Gary Coffman) writes:

>In article <2so39e\$t29@sugar.NeoSoft.COM> jreese@sugar.NeoSoft.COM (Jim Reese)
>writes:

>>In article <gregCqts8v.45J@netcom.com>, Greg Bullough <greg@netcom.com> wrote:
>>

>>>Rather interesting that the

>>>phrase 'closed repeater' and 'accomodate everyone' can be used together,

>>>I think. But typical of the convoluted logic which those who are reaching

>>>to justify their monopolization of a frequency on a a crowded band.

>>

>>Let's not twist my meaning here...

>>

>>By "accomodate everyone", I meant that the coordinating body must accomodate
>>equally both trustees of open repeaters and trustees of closed ones. Its job
>>is to minimize interference, not make judgement calls as to who is "more
>>worthy" of a frequency.

>

>This is where the classic frequency coordinator hat and the spectrum
>management hat get tangled. Many coordinating bodies try to wear both
>hats and there is a basic conflict. As coordinators, their constituency
>is repeater station operators and potential repeater station operators,
>but as spectrum managers, their constituency is the entire amateur
>community.

>

>Many people feel that the only correct policy as coordinator is

>"first come, first serve", so whoever first files a non-conflicting

>application to operate a repeater gets the coordination in perpetuity.

>However, as spectrum managers, the body has to take into account the

>interests of all of the amateur community, users as well as operators

>of the designated repeater spectrum, in order to maximize the utility

>of the limited public resource to *all* amateurs. This is a dynamic

>role in a growing service. It's in this latter role of establishing

>public policy that most coordinating bodies fail to carry out their
>responsibilities.

>

>Since coordination bodies are generally elected by their members,
>almost exclusively repeater owners, they tend to protect the
>status quo. That's only natural. However, when they also attempt
>to wear a spectrum manager hat and set public policy, they aren't
>representative of the amateur community at large. This is a fatal
>flaw and a basic conflict of interest.

>

>The current issue of "closed" versus "open" is not a coordination issue.
>It's a spectrum management policy issue. Currently constituted coordination
>bodies aren't suited to dealing with this issue. It must be dealt with by a
>body representative of all amateur interests. In most cases, such a body
>doesn't currently exist. Current coordinating bodies would do the amateur
>community a service by taking off their spectrum management hats and admitting
>they aren't the proper representatives to address the issues involved. What
>we have now is a committee of foxes setup to set fencing standards for the
>chicken coop.

As an ex-repeater coordinator with about 10 years experience coordinating,
Gary has made some valuable observations here although there are some
points I'd like to make. First, not all coordinating bodies represent only
repeater operators - B.C. and Washington, for example, allow any
interested amateur to join the organization, and I suspect others do too.

The coordination group, however, like almost all coordination groups, is
mainly made up of people interested in repeater operation issues - like
coordination - and as a consequence they naturally look out for their own
interests - and since most of them are reps of repeater groups, it is
almost impossible to pass proposals through repeater coordination that
would spread access to existing channels.

I certainly have vivid memories of the time we tried to start PL sharing
of repeater frequencies (even with a five year phase in) so that new
groups would also be able to use the spectrum that was least heavily used.
My point basically is that many (or at least some, :-)) frequency coord-
inators would like to ensure more sharing of channel spectrum when repeaters
are lightly loaded, but are just unable to get such proposals past the
current crop of ham politicians in the coordinating bodies.

Second, we have a major problem when dealing with the ARRL VHF/UHF
Committees, (and had with the CRRL, now RAC committees as well) who
certainly were neither favourably disposed to repeater operation in
general nor particularly knowledgeable in the field of repeater ops. As a
consequence, we've had an absence of effective leadership in the whole area
of VHF/UHF bandplanning in general. And because coordination councils haven't
had confidence in the ARRL, or felt they had a mandate to do bandplanning

outside the repeater sections of the bands (I'm not implying they don't have opinions about it, :-)), nobody has been doing a really effective job of dealing with these issues.

I'm not going to comment on the closed/open repeater discussion, because up here virtually every repeater is open, tho some are friendlier than others.

I don't see that repeater coordinations SHOULD be set in stone, although many repeater operators do. I do think that ANY process that coordinates repeaters needs to have a mechanism to vary the parameters of a coordination at some future date - providing this is done in a fair, even handed, public and predictable manner. Repeater ops need to be able to plan how to run their system well into the future, and not be subject to unexpected alterations and intrusions.

At the same time, bandplanning needs to be realistic in terms of what's needed now, as well as what's needed in the future. Bandplans should not simply provide spectrum for everyone that wants it, whether or not it's used. CW and weaksignal work, for example, on the VHF/UHF bands have far more spectrum allocated than is warranted by the number of amateurs using those modes, especially when FM and packet modes are bursting at the seams.

Spectrum needs to be allocated both by frequency AND time. Repeater control links, for example, could be congregated on a small number of frequencies since they're often highly directional and can be PL'ed separately. And very lightly loaded repeaters ought to be the first candidates for some form of time sharing.

Hams might take a page from some of the commercial bands, where almost every frequency is more heavily loaded than ours are.
emd@ham.island.net (Robert Smits Ladysmith BC)

Date: Sun, 5 Jun 1994 22:44:31 MDT
From: ihnp4.ucsd.edu!library.ucla.edu!psgrain!nntp.cs.ubc.ca!alberta!ve6mgs!
usenet@network.ucsd.edu
Subject: Daily Summary of Solar Geophysical Activity for 05 June
To: info-hams@ucsd.edu

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DAILY SUMMARY OF SOLAR GEOPHYSICAL ACTIVITY

05 JUNE, 1994

Geophysical activity forecast: the geomagnetic field is expected to be mostly quiet to active for day one of the forecast period. Some high latitude local nighttime minor storm conditions can be expected. By day two and three, overall levels are expected to decrease to mostly quiet to unsettled with some active periods expected during local nighttime.

Event probabilities 06 jun-08 jun

Class M	01/01/01
Class X	01/01/01
Proton	01/01/01
PCAF	Green

Geomagnetic activity probabilities 06 jun-08 jun

A. Middle Latitudes	
Active	25/25/20
Minor Storm	20/15/10
Major-Severe Storm	10/05/05
B. High Latitudes	
Active	30/30/25
Minor Storm	15/15/10
Major-Severe Storm	20/15/05

HF propagation conditions returned to near-normal over most regions, except periods of minor signal degradation on transauroral circuits. Night sectors are still experiencing periods of minor signal instability mostly in the form of fading. Similar conditions are expected over the next 48 to 72 hours. Conditions should continue to gradually improve through 08 June inclusive.

COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS

=====

REGIONS WITH SUNSPOTS. LOCATIONS VALID AT 05/2400Z JUNE

NMBR	LOCATION	LO	AREA	Z	LL	NN	MAG	TYPE
7728	S07W92	321						PLAGE
REGIONS DUE TO RETURN 06 JUNE TO 08 JUNE								
NMBR	LAT	LO						
7722	N09	122						

LISTING OF SOLAR ENERGETIC EVENTS FOR 05 JUNE, 1994

 BEGIN MAX END RGN LOC XRAY OP 245MHZ 10CM SWEEP
 NONE

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 05 JUNE, 1994

 BEGIN MAX END LOCATION TYPE SIZE DUR II IV
 NO EVENTS OBSERVED

INFERRED CORONAL HOLES. LOCATIONS VALID AT 05/2400Z

 ISOLATED HOLES AND POLAR EXTENSIONS
 EAST SOUTH WEST NORTH CAR TYPE POL AREA OBSN
 83 S60E16 S60E16 S30W74 S22W28 258 EXT NEG 041 10830A
 85 S08E54 S24E36 S10E16 N15E41 195 ISO POS 017 10830A

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

 Date Begin Max End Xray Op Region Locn 2695 MHz 8800 MHz 15.4 GHz

 NO EVENTS OBSERVED.

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

 C M X S 1 2 3 4 Total (%)

 Uncorrelated: 0 0 0 0 0 0 0 0 000 (0.0)

Total Events: 000 optical and x-ray.

EVENTS WITH SWEEPS AND/OR OPTICAL PHENOMENA FOR THE LAST UTC DAY

 Date Begin Max End Xray Op Region Locn Sweeps/Optical Observations

 NO EVENTS OBSERVED.

NOTES:

All times are in Universal Time (UT). Characters preceding begin, max,
 and end times are defined as: B = Before, U = Uncertain, A = After.

All times associated with x-ray flares (ex. flares which produce associated x-ray bursts) refer to the begin, max, and end times of the x-rays. Flares which are not associated with x-ray signatures use the optical observations to determine the begin, max, and end times.

Acronyms used to identify sweeps and optical phenomena include:

II	= Type II Sweep Frequency Event
III	= Type III Sweep
IV	= Type IV Sweep
V	= Type V Sweep
Continuum	= Continuum Radio Event
Loop	= Loop Prominence System,
Spray	= Limb Spray,
Surge	= Bright Limb Surge,
EPL	= Eruptive Prominence on the Limb.

** End of Daily Report **

Date: 6 Jun 94 06:18:48 GMT
From: dog.ee.lbl.gov!newshub.nosc.mil!cg57.esnet.com!bbs.dsnet.com!
usenet@ucbvax.berkeley.edu
Subject: SMALL HT POUCHES 4SALE
To: info-hams@ucsd.edu

★VERSA-POUCHES★

!!!!!!2 VERSIONS!!!!!!

YAESU FT-11R and small HT owners,

For those of you that have requested HOLD DOWN STRAPS on the VERSA-POUCH,

We now have another version of the VERSA-POUCH with hold down straps.
Which

holds down your HT and prevents it from falling out of the case.

Because of this new version, the CASE PRICE will slightly increase to 6.00 per

case, 5.50 for 2 or more. If interested please send a reply message ASAP.

The makers of this pouch will only produce, these POUCHES with hold down straps,

by request. So let me know how many you want and we'll take it from there...

Depending on the size of the order, it'll take 1 day, for single pouches to

1 Week plus, for larger orders. Also, because of this NEW VERSION, the VERSA-

POUCH can be customized to fit MOST small HT's, but you'd need to pay & order in advance.

PRICE BREAK DOWN:

MODEL #: VP-1-NS

Regular Pouch, no hold down straps = \$4.00 or \$3.50ea. for 2 or more.

MODEL #: VP-1-WS

NEW VERSION Pouch, with hold down straps = \$6.00 or 5.50ea. for 2
or
more.

Even for \$6.00, you still can't go wrong!!!!

PLEASE DO NOT FORGET TO INCLUDE SHIPPING...

Thanks again to many of you for your interests and suggestions... SPREAD
THE
WORD...

73 David.

Date: 6 Jun 94 04:51:17 GMT
From: news.delphi.com!BIX.com!jdow@uunet.uu.net
Subject: SSB Filters
To: info-hams@ucsd.edu

k23690@proffa.cc.tut.fi (Kein{nen Paul) writes:

>Elendir (elendir@enst.fr) wrote:

>> What I'd like to find out is a 10.7003 to 10.703 Xtal Filter, with at least
>> 60 dB at 10.6997 MHz. But a 9 MHz look-alike filter (or any IF) would
>> fit also.

>It is hard to find asymmetric USB (and LSB) filters these days.
>In a few years old design for 9 MHz IF, KVG XFM-9B01 and XFM-9B02

>were used. I am not sure which one is LSB and which one is USB as
>contradictory information was given in the article.

>If you settle for a single symmetrical SSB filter, then different
>BFO-frequencies for USB and LSB are needed, but the number of suitable
>filters is much larger. One source for 10.7 MHz filters in England is
>Cirkit (tel. +44-992-441306).

10.7Mhz is not exactly well suited for high quality SSB crystal filter design. Crystals DO change frequency with both temperature and time. Not all crystals, even of similar cuts, change the same way by the same amount. Hence the crystal filter characteristics will change with temperature, such as for Field Day operation, and with time, due to crystal aging. Most of my designs selected much lower IFs when I had the luxury of "doing it right." 5MHz was the highest I figured was marginally acceptable.

>If you think about a single conversion design, 9 or 10.7 MHz IF is quite
>low, usable at 144-146 MHz, but if you are going to use it on 70 cm,
>you should put separate helical front end filters for the 432 MHz DX-
>band and the 435-438 MHz satellite band.

Wellllll, single conversion is not nice no matter how you do it unless you are REALLY anxious to maintain low power operation. For VHF I'd go to a dual conversion with first conversion up to the 70Mhz to 140MHz range. For UHF I'd consider a first IF of 70MHz quite workable. For 144MHz - who uses it? (LA bias. {^_-}) For 144MHz I'd use a 21.4MHz 16KHz wide filter in the first IF and double convert to between 455KHz (mechanical filters) to 5MHz. (I find the filters required in things like Syntors to be a royal PITA because of their necessary narrow bandwidths. They are required to reduce the half-IF response as much as anything. (Fr +/- 1/2 FIF response) I'd rather select something a little less stringent based on requirements for reducing chances of front end overload and if possible custom tailor it to that function.

> Paul OH3LWR
>

>-----
>Phone : +358-31-213 3657
>X.400 : G=Paul S=Keinanen O=Kotiposti A=ELISA C=FI
>Internet: Paul.Keinanen@Telebox.Mailnet.fi
>Telex : 58-100 1825 (ATTN: Keinanen Paul)
>Mail : Hameenpuisto 42 A 26
> FIN-33200 TAMPERE
> FINLAND

(I designed VERY high dynamic range radios for DoD usages for about 20 years before I discovered software burned my fingers a LOT less than soldering irons

and was easier as well. At least one design was able to operate with no alteration in BER when receiving -109dBm signals in the presence of inband -5dBm signals (which was as high as I could conveniently generate with the test lashup.) So I have a half an idea what I am doing and am TERRRRRRIBLY opinionated. I also do not reveal ham licence call for reasons of privacy having faced a nasty threat based on it.)
{^_^} jdown@bix.com

Date: Mon, 6 Jun 1994 09:37:20 GMT
From: ihnp4.ucsd.edu!sdd.hp.com!apollo.hp.com!hpwin055.uksr!hpqmoea!
dstock@network.ucsd.edu
Subject: SSB Filters
To: info-hams@ucsd.edu

Date: Mon, 6 Jun 1994 05:54:45 GMT
From: news.Hawaii.Edu!uhunix3.uhcc.Hawaii.Edu!jherman@ames.arpa
To: info-hams@ucsd.edu

References <rogjdCqMnyJ.565@netcom.com>, <1994Jun2.135032.15067@cs.brown.edu>,
<rogjdCqvLst.KD1@netcom.com>
Subject : Re: 440 in So. Cal.

In article <rogjdCqvLst.KD1@netcom.com> rogjd@netcom.com (Roger Buffington) writes:

>

>That's a hoot! 3000+ hams! We have more than that within a radius of
>three miles of my QTH! In fact, we have somewhere on the order of 50,000
>hams within simplex range of my QTH. Perhaps you simply don't understand
>the issues here in Southern California.

What issues? Seems as if you have plenty of people to talk to on simplex.
Why bother to use a repeater?

Jeff NH6IL

Date: 6 Jun 94 07:17:54 GMT
From: ihnp4.ucsd.edu!library.ucla.edu!psgrain!reuter.cse.ogi.edu!
netnews.nwnet.net!uofport.edu!hood!peter1@network.ucsd.edu
To: info-hams@ucsd.edu

References <2skv9f\$a2l@bigfoot.wustl.edu>, <1994Jun4.081913.2429@hnrc.tufts.edu>,
<2sq5np\$p2j@nyx10.cs.du.edu>port.
Subject : Re: FCC computers up!

I can say that if the FCC thinks that they are doing great by processing
300 apps a day, that is a crock of sh*t.

I finally received my license after about 10-12 weeks of waiting, and will
have to say that, as a reputable Mac/PC/UNIX computer consultant here in
the Portland area, I am EXTREMELY disappointed with the fact that the FCC
knows NOTHING about how to run an Information Systems department.

First of all, hasn't the FCC ever heard of a data entry folks? Those
people type data in, with 99.99999% accuracy at incredible speeds.

Second, if this is such a problem with the FCC, why don't they outsource
it and pay some company some reasonable rates?

Once again, the FCC is showing just how inefficient government agencies
can be, and I think folks who take the time to get into ham radio are
being served a tremendous disservice.

-Peter B. Lee, EMT, KC7CJF
Search & Rescue/Disaster Relief Communications/Ground Team member/trainee

--

Peter Lee, EMT, Search & Rescue Volunteer (CAP)
University -Voice: (503) 870-1487 *PageNET Voice Mail/Paging System*
of -Fax: (503) 289-2856 *Available 24 hours, use FINE mode!*

Date: 6 Jun 1994 01:28:46 -0700
From: ihnp4.ucsd.edu!news.cerf.net!ccnet.com!ccnet.com!not-for-
mail@network.ucsd.edu
To: info-hams@ucsd.edu

References <rogjdCqvLJD.K4J@netcom.com>, <1994Jun4.165326.8941@cs.brown.edu>,
<2suau8\$cvj@kaiwan.kaiwan.com>
Subject : Re: 440 in So. Cal.

Robb Topolski KJ6YT (topolski@kaiwan.com) wrote:
: Michael P. Deignan (md@pstc3.pstc.brown.edu) wrote:

: > I don't arbitrarily assign "utilization" as the criteria by which
: > repeaters should be coordinated. There are numerous repeaters in this

: > area which receive less utilization than my closed machine. Using your
: > criteria, we should decoordinate those "open" repeaters.

: > Since high utilization of an open repeater generally implies excellent
: > coverage, it also implies high site, high power, and expensive equipment.

: No, but perhaps it should be a criteria. For example, your application
: for a 3-neighbor system at the county's highest location vs. a 200-member
: club who wants to put up an open repeater at the same site. Who should
: be approved for the high-visibility site? The 200-member club's open
: system. Who should be guided toward better use? The 3-user system.

Generally what happens is both groups must approach the existing
coordinated repeaters on the frequency. Everyone knows there will be some
spillover into the adjacent coverage areas. Who ever makes the best share
will get coordinated. It is basicly up to the coordinated trustees on the
frequency to make the best decision.

Would your group share the frequency with a group similar to yours or
concoider sharing with a 200 member group that already has a 2meter
repeater. Most of the time the new 440 repeater is only simulcasting the
2meter repeater and has only three real users. The difference is that most
of the amateurs heard on the frequency are not using the repeater but are
imported from an other band.

Who should be guided toward better use?

Bob

--

Bob Wilkins	work	bwilkins@cave.org
Berkeley, California	home	rwilkins@ccnet.com
94701-0710	play	n6fri@n6eeg.#nocal.ca.usa.noam

Date: Mon, 6 Jun 1994 05:23:45 GMT
From: news.Hawaii.Edu!uhunix3.uhcc.Hawaii.Edu!jherman@ames.arp
To: info-hams@ucsd.edu

References <[2sja4j\\$lni@abyss.West.Sun.COM](mailto:2sja4j$lni@abyss.West.Sun.COM)>, <Cqsn7v.FsI@news.Hawaii.Edu>,
<rogjdCqunyu.4rC@netcom.com>
Subject : Re: Reality check (was Re: Ham Radio few problem)

In article <rogjdCqunyu.4rC@netcom.com> rogjd@netcom.com (Roger Buffington)

writes:

>Jeffrey Herman (jherman@uhunix3.uhcc.Hawaii.Edu) wrote:

>

>: I knew the Defender of Radio Lawbreakers would eventually surface. You

>: came to Bly's defense in December when he bragged about operating

>: without a license, and now in June Bly resurfaces and so do you.

>

>Oh, come on, this is silly and asinine. Linking Dana to Bly when what he

>is really doing is offering a well-reasoned response on the subject of

>this thread.

You're new on here so let me fill you in:

1. One fellow was bragging about how he was going to place a 5 kW broadcast band transmitter on the ham bands and about how he didn't care about the FCC rules, etc. - I scolded him - Dana came to his defense.

2. Bly bragged about how easy it is to operate in SoCal without a license and that he'd done it for years - I scolded him - Dana came to his defense.

3. Someone was inviting pirates to use 6 Mc air-to-ground frequencies - I argued with him about the danger of that - Dana came to his defense.

4. Bly now brags about jamming closed 440 Mc repeaters - I scold him - Dana shows up.

You might want to 'read the mail' for a couple of months before you become too critical.

Jeff NH6IL

End of Info-Hams Digest V94 #634
